

Title (en)

ROLLER TAPPET FOR A PISTON PUMP, PISTON PUMP

Title (de)

ROLLENSTÖßEL FÜR EINE KOLBENPUMPE, KOLBENPUMPE

Title (fr)

POUSOIR À GALET POUR UNE POMPE À PISTON ET POMPE À PISTON

Publication

EP 3519695 A1 20190807 (DE)

Application

EP 17764387 A 20170907

Priority

- DE 102016218909 A 20160929
- EP 2017072468 W 20170907

Abstract (en)

[origin: WO2018059900A1] The invention relates to a roller tappet (1) for a piston pump, in particular for a high-pressure fuel pump, for supporting a pump piston (2) which can move in a reciprocating motion on a cam (3) or eccentric of a drive shaft (4), comprising a tappet body (5) with an end-side recess (6) and two radial bores (7) which lie diametrically opposite one another at the recess (6) and receive a pin (8), on which a roller (10) is rotatably mounted directly or indirectly via a bearing bush (9), wherein at least one radially or obliquely running feed bore (12) is configured in the tappet body (5) in order to supply a lubricating medium to a radial bearing gap (11) which is configured between the roller (10) and the pin (8) or between the roller (10) and the bearing bush (9), which feed bore (12) opens into the recess (6) in the region of an axial bearing gap (13) between the roller (10) and the tappet body (5). According to the invention, the feed bore (12) is connected to an arcuately running lubricating duct (14) which is configured in a surface (15) of the tappet body (5), which surface (15) delimits the axial bearing gap (13). Furthermore, the invention relates to a piston pump comprising a roller tappet (1) of said type.

IPC 8 full level

F04B 1/04 (2006.01); **F04B 53/18** (2006.01)

CPC (source: EP KR US)

F01L 1/14 (2013.01 - US); **F02M 59/102** (2013.01 - EP KR US); **F02M 59/44** (2013.01 - US); **F02M 63/0001** (2013.01 - EP KR); **F04B 1/0426** (2013.01 - EP KR); **F04B 53/18** (2013.01 - EP KR); **F16C 33/1045** (2013.01 - US); **F16H 53/06** (2013.01 - US); **F02M 63/0001** (2013.01 - US); **F04B 53/18** (2013.01 - US); **F05B 2260/98** (2013.01 - KR)

Citation (search report)

See references of WO 2018059900A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102016218909 A1 20180329; CN 109790827 A 20190521; CN 109790827 B 20210914; EP 3519695 A1 20190807; EP 3519695 B1 20200715; JP 2019529778 A 20191017; JP 6767576 B2 20201014; KR 20190055190 A 20190522; US 10982637 B2 20210420; US 2020370524 A1 20201126; WO 2018059900 A1 20180405

DOCDB simple family (application)

DE 102016218909 A 20160929; CN 201780060637 A 20170907; EP 17764387 A 20170907; EP 2017072468 W 20170907; JP 2019515277 A 20170907; KR 20197011643 A 20170907; US 201716336516 A 20170907